

Title (en)  
Improved air isolated crossovers

Title (de)  
Verbesserte luftisolierte Kreuzungsstruktur

Title (fr)  
Structure de croisement isolée de l'air améliorée

Publication  
**EP 0908951 B1 20070124 (EN)**

Application  
**EP 98307916 A 19980929**

Priority  
US 94669397 A 19971008

Abstract (en)  
[origin: EP0908951A2] The specification describes integrated circuit air isolated crossover interconnections designed for flip chip multi-chip module interconnection technology. The crossovers are made using a crossover interconnection substrate separate from the interconnection substrate of the integrated circuit. In one embodiment the integrated circuit is flip chip bonded to a multi-chip or multi-component interconnection substrate, and the crossover interconnections are made through solder bumps or balls soldered to a conductive layer on the crossover interconnection substrate. In another embodiment the crossover is made via a crossover substrate flip chip bonded to an integrated circuit mounted on a multi-chip or multi-component interconnection substrate. <IMAGE>

IPC 8 full level  
**H01L 23/522** (2006.01); **H05K 1/11** (2006.01); **H01L 21/60** (2006.01); **H01L 21/768** (2006.01); **H01L 23/14** (2006.01); **H01L 23/485** (2006.01); **H01L 23/538** (2006.01); **H01L 25/00** (2006.01)

CPC (source: EP US)  
**H01L 23/147** (2013.01 - EP US); **H01L 23/538** (2013.01 - EP US); **H01L 23/5385** (2013.01 - EP US); **H01L 24/10** (2013.01 - US); **H01L 24/13** (2013.01 - US); **H01L 24/81** (2013.01 - EP US); **H01L 24/05** (2013.01 - EP); **H01L 24/13** (2013.01 - EP); **H01L 24/16** (2013.01 - EP); **H01L 2224/05124** (2013.01 - EP); **H01L 2224/05147** (2013.01 - EP); **H01L 2224/05171** (2013.01 - EP); **H01L 2224/05644** (2013.01 - EP); **H01L 2224/05647** (2013.01 - EP); **H01L 2224/13** (2013.01 - EP US); **H01L 2224/13099** (2013.01 - EP US); **H01L 2224/16145** (2013.01 - EP US); **H01L 2224/81801** (2013.01 - EP US); **H01L 2924/01004** (2013.01 - EP US); **H01L 2924/01005** (2013.01 - EP US); **H01L 2924/01006** (2013.01 - EP US); **H01L 2924/01013** (2013.01 - EP US); **H01L 2924/01022** (2013.01 - EP US); **H01L 2924/01024** (2013.01 - EP US); **H01L 2924/01027** (2013.01 - EP US); **H01L 2924/01029** (2013.01 - EP US); **H01L 2924/01033** (2013.01 - EP US); **H01L 2924/01046** (2013.01 - EP US); **H01L 2924/0105** (2013.01 - EP US); **H01L 2924/01051** (2013.01 - EP US); **H01L 2924/01073** (2013.01 - EP US); **H01L 2924/01078** (2013.01 - EP US); **H01L 2924/01079** (2013.01 - EP US); **H01L 2924/01082** (2013.01 - EP US); **H01L 2924/01322** (2013.01 - EP US); **H01L 2924/01327** (2013.01 - EP US); **H01L 2924/014** (2013.01 - EP US); **H01L 2924/10253** (2013.01 - EP US); **H01L 2924/10329** (2013.01 - EP US); **H01L 2924/14** (2013.01 - EP US); **H01L 2924/15787** (2013.01 - EP US); **H01L 2924/19041** (2013.01 - EP US); **H01L 2924/19042** (2013.01 - EP US)

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